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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,580	08/17/2001	Scott Ashkenasz	KT-1040A	3952

35617 7590 09/28/2004

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EXAMINER

GARLAND, STEVEN R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 09/28/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,580

Applicant(s)

ASHKENASZ ET AL.

Examiner

Steven R Garland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/28/02, 7/12/02, 7/25/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification or in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)). The specific reference to any prior nonprovisional application must include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

2. A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because the pages do not have proper top margins, resulting in holes being punched in the text during initial application processing.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying

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clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

3. The disclosure is objected to because of the following informalities: on page 4, the status of the copending application should be updated. It is also noted that the pages are not numbered.

Appropriate correction is required.

4. The drawings were received on 3/28/02. These drawings are acceptable.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 7 is rejected under 35 U.S.C. 102(e) as being anticipated by Abraham et al. 6,420,864.

Abraham et al. teaches an apparatus for manufacturing semiconductor devices and teaches use of standardized containers and/or measurement chambers; transfer of wafers; use of a computer, power source, or other device in close proximity to the measurement device or at a distance from the measurement device. See the figures; col. 1, lines 30-52; col. 2, lines 16-27; col. 3, lines 1-13; col. 4, lines 1-12; col. 6, lines 5-

67; and the claims. Note claim 5 about the identical interfaces which allows either the container or chamber pod forms to be interchanged at a port (interface).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1,2,5,6,and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abraham et al. 6,420,864 in view of Fairbairn et al. 6,625,497.

Abraham et al. teaches an apparatus for manufacturing semiconductor devices and teaches use of standardized containers and/or measurement chambers; transfer of wafers; use of a computer, power source, or other device in close proximity to the measurement device or at a distance from the measurement device. See the figures; col. 1, lines 30-52; col. 2, lines 16-27; col. 3, lines 1-13;col. 4, lines 1-12; col. 6, lines 5-

67; and the claims. Note claim 5 about the identical interfaces which allows either the container or chamber pod forms to be interchanged at a port (interface).

Abraham however does not specifically provide a processing chamber , or teach moving wafers between the process chamber and the measurement chamber,

Fairbairn teaches the use of a cluster station having processing and measuring devices; moving a wafer between a processing device and a measurement device. Fairbairn also teaches that in response to the measurements that the wafer could require further processing. See the abstract; figures; col. 3, lines 27-45; col. 4, lines 40-67; col. 5, lines 1-67; col. 7, lines 3-36; col. 8, lines 3-67; col. 10, line 47 on. Note the description of figures 9a on.

It would have been obvious to one of ordinary skill in the art to modify Abraham in view of Fairbairn to use a cluster station to perform processing as well as measuring and speed up the wafer processing.

Further it would have been obvious to one of ordinary skill in the art to modify Abraham in view of Fairbairn to measure a wafer at various stages such as before or after processing so that the wafer processing could be controlled and prevent generating defective wafers.

10. Claims 3,4, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abraham et al. 6,420,864 in view of Fairbairn et al. 6,625,497 as applied to claims 1,2,5,6,and 8-11 above, and further in view of Martin 6,591,162.

Abraham et al. teaches an apparatus for manufacturing semiconductor devices and teaches use of standardized containers and/or measurement chambers; transfer

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of wafers; use of a computer, power source, or other device in close proximity to the measurement device or at a distance from the measurement device. See the figures; col. 1, lines 30-52; col. 2, lines 16-27; col. 3, lines 1-13; col. 4, lines 1-12; col. 6, lines 5-67; and the claims. Note claim 5 about the identical interfaces which allows either the container or chamber pod forms to be interchanged at a port (interface).

Abraham however does not specifically provide a processing chamber , or teach moving wafers between the process chamber and the measurement chamber,

Fairbairn teaches the use of a cluster station having processing and measuring devices; moving a wafer between a processing device and a measurement device. Fairbairn also teaches that in response to the measurements that the wafer could require further processing. See the abstract; figures; col. 3, lines 27-45; col. 4, lines 40-67; col. 5, lines 1-67; col. 7, lines 3-36; col. 8, lines 3-67; col. 10, line 47 on. Note the description of figures 9a on.

It would have been obvious to one of ordinary skill in the art to modify Abraham in view of Fairbairn to use a cluster station to perform processing as well as measuring and speed up the processing.

Further it would have been obvious to one of ordinary skill in the art to modify Abraham in view of Fairbairn to measure a wafer at various stages such as before or after processing so that the wafer processing could be controlled and prevent generating defective wafers.

Abraham and Fairbairn however do not teach the use of FOUP, FIMS, or kinematic mounts.

Martin teaches monitoring exchangeable FOUP pods for various conditions such as determining if the interface has sealed properly, etc. ; and also teaches the use of kinematic mounting; SMIF or other standards. See the abstract; figures; col. 1, line 21 to col. 3, line 20; col. 6, lines 29-63; col. 7, lines 9-23.

It would have been obvious to one of ordinary skill in the art to modify Abraham and Fairbairn in view of Martin to use FOUP type pods and use kinematic mounting in view of Martin. This would allow monitoring the interface to insure that the pod interface has sealed, allow ease in mounting the pods, and prevent contamination.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sun 5,940,175 is of interest in use of a measurement chamber. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R Garland whose telephone number is 703-305-9759, after 10/13/04 at 571-272-3741. The examiner can normally be reached on Monday-Thursday from 6:30 to 5:00.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on 703-308-0538 after 10/12/04 at (571)272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Application/Control Number: 09/932,580

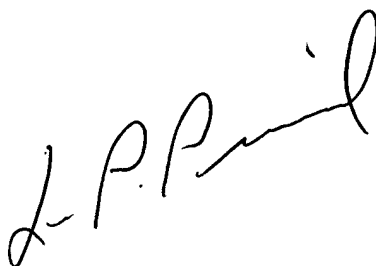
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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sn6

STEVEN GARLAND

A handwritten signature in black ink, appearing to read "L. P. Picard", written in a cursive style.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100